

Claims

What is claimed is:

1. A method of facilitating communication services for a communications unit such services selected from a plurality of communications service providers, the method including the steps of:
 - receiving, at the communications unit using a first service provider, an indication of a desired communications;
 - determining, in accordance with said indication, first communications services available to the communications unit from a second service provider; and
 - sending, using said first service provider, an indication of said first communications services to a second communications unit.
2. The method of claim 1 wherein said step of receiving further includes receiving an indication of second communications services desired by a second communications unit.
3. The method of claim 2 wherein said step of receiving further includes receiving first affiliation information corresponding to said second communications services.
4. The method of claim 2 wherein said step of sending further includes sending an acknowledgement of said second communications services together with second affiliation information corresponding to said second communications services.
5. The method of claim 2 wherein said step of sending further includes sending an indication of communications services corresponding to said second communications services and alternative services, all such communications services available to the communications unit.
6. The method of claim 5 wherein said step of sending further includes sending second affiliation information corresponding to said all such communication services.
7. The method of claim 5 further including a step of receiving an indication of third communications services selected by said second communications unit.

8. The method of claim 7 wherein said step of receiving said indication of said third communications services selected by said second communications unit further includes receiving affiliation information for said third communications services.

9. The method of claim 1 wherein said step of receiving an indication of a desired communications uses one of a cellular phone service provider or paging service provider; and said step of determining said first communications services available from a second service provider includes determining communications services available from one of an internet service provider, a local area network provider, a broadband service provider, and a 3G service provider.

10. The method of claim 2 wherein said step of receiving occurs while the communications unit and said second communications unit participate in a previously established call.

~~11.~~ A method of facilitating communication services for a communications unit, such services selected from a plurality of communications service providers, the method including the steps of:

sending, to a second communications unit using a first service provider, an indication of a desired communications;

determining, in accordance with said indication, first communications services available to said second communications unit from a second service provider; and

initiating communications with said second communications unit using said first communications services available from said second service provider.

12. The method of claim 11 wherein said step of sending further includes sending an indication of second communications services desired by the communication unit to one of said second communications unit or a communications server.

13. The method of claim 12 wherein said step of sending further includes sending affiliation information corresponding to said second communications services.

14. The method of claim 12 wherein said step of determining further includes a step of receiving an acknowledgement of said second communications services together with affiliation information corresponding to said second communications services.

15. The method of claim 12 further including a step of receiving an indication of communications services corresponding to said second communications services and alternative services, all such communications services available to said second communications unit.

16. The method of claim 15 wherein said step of receiving further includes receiving second affiliation information corresponding to said all such communications services.

17. The method of claim 15 further including a step of sending an indication of third communications services selected by the communications unit to said second communications unit.

18. The method of claim 17 wherein said step of sending an indication of third communications services further includes sending affiliation information for said third communications services selected by the communications unit.

19. The method of claim 11 wherein said step of sending an indication of said desired communications uses one of a cellular phone service provider or a paging service provider; and said step of determining first communications services from said second service provider includes determining communications services available from one of an internet service provider, a local area network provider, a broadband service provider, and a 3G service provider.

- ~~20.~~ A method of selecting communications services for a communications unit, such services selected from a plurality of communications service providers, the method including the steps of:
- establishing contact between the communications unit and a second communications unit using a first service provider;
 - determining communications services required for a communications exchange between the communications unit and said second communications unit
 - discovering communications services available from a second service provider, such services suitable for use by the communications unit and said second communications unit;
 - selecting the communication services from said first service provider and said second service provider, the communications services selected in accordance with said communications services required for a communications exchange.
21. The method of claim 20 wherein said step of discovering and selecting is undertaken by a communications server.
22. The method of claim 21 wherein said step of selecting is undertaken by said communications server based on one of available bandwidth and cost for said communications services.
23. The method of claim 20 wherein said steps of discovering and selecting are undertaken after said communications exchange has been initiated using said first service provider.
24. The method of claim 21 wherein said steps of discovering and selecting are undertaken by said communications server on behalf of one of said communications unit and said second communications unit.
25. The method of claim 24 further including steps of authenticating and authorizing one of said communications unit and said second communications unit to use said communications services.
26. The method of claim 24 further including a step of billing one of said communications unit and said second communications unit for use of said communications services.

27. A communications unit arranged for selecting communications services from a plurality of communications service providers, including in combination:
- a user interface for accepting input indicative of desired communications services; and
 - a transceiver and a controller, coupled to said user interface, operable for:
 - discovering first communications services available from a second service provider for a second communications unit,
 - establishing, using a first service provider, a communications link between the communications unit and said second communications unit, and
 - sending an indication of said desired communications services for a communications exchange between the communications unit and said second communications unit.
28. The communications unit of claim 27 wherein said controller selects the communication services from said first service provider or said second service provider, the communications services selected in accordance with said desired communications services and controls said transceiver to initiate communications with said second communications unit using the communications services.
29. The communications unit of claim 27 wherein said transceiver sends said indication of said desired communications services and first affiliation information to one of said second communications unit or a communications server.
30. The communications unit of claim 29 wherein said transceiver receives an acknowledgement of said desired communications services together with second affiliation information corresponding to said desired communications services.
31. The communications unit of claim 27 wherein said transceiver receives an indication of communications services corresponding to said desired communications services and alternative services, all such communications services available to said second communications unit.
32. The communications unit of claim 31 wherein said transceiver further sends an indication of second communications services selected by the communications unit to said second communications unit.

33. The communications unit of claim 27 wherein said transceiver;
sends said indication of said desired communications services using one of a cellular phone service provider and a paging service provider; and
discovers said first communications services available from one of an internet service provider, a local area network provider, a broadband service provider, and a 3G service provider.
- ~~34.~~ A communications unit arranged for selecting communications services from a plurality of communications service providers, including in combination:
a user interface for providing user output and accepting input relevant to communications services; and
a transceiver and a controller, coupled to said user interface, operable for:
receiving, using a first service provider, an indication of a desired communications for a communications exchange between the communications unit and a second communications unit;
discovering first communications services available from a second service provider for the communications unit,
sending an indication of said first communications services to said second communications unit.
35. The communications unit of claim 34 wherein said transceiver further sends an acknowledgement of said desired communications together with second affiliation information corresponding to said first communications services.
36. The communications unit of claim 34 wherein said transceiver sends an indication of communications services corresponding to said desired communications services and alternative services, all such communications services available to the communications unit.
37. The communications unit of claim 36 wherein said transceiver receives an indication of communications services selected by one of said second communications unit or a communications server.

38. The communications unit of claim 34 wherein said transceiver receives said indication of said desired communications using one of a cellular phone service provider and a paging service provider; and discovers communications services available from one of an internet service provider, a local area network provider, a broadband service provider, and a 3G service provider.

- ~~39.~~ A communications server arranged for selecting communications services from a plurality of communications service providers, including in combination:
- a processing unit; and
 - a memory operably coupled to the processing unit, wherein the memory stores programming instructions that, when read by the processing unit, causes the processing unit to:
 - f) receive, using a first protocol of a first service provider, an indication of a desired communications from a communication unit,
 - g) establish, responsive to said indication and using said first protocol, contact with a second communication unit,
 - h) determine, responsive to said indication, first communication services desired for a communication exchange between the communications unit and said second communications unit,
 - i) discover what second communications services, using a second protocol of a second service provider, are available to said second communications unit, and
 - j) select the communications services using said first protocol and using said second protocol to support said communications exchange between the communications unit and said second communications unit.

40. The communications server of claim 39 wherein said processing unit further receives a response from said second communications unit and sends a response to the communication unit using said first protocol.

41. The communications server of claim 39 wherein said processing unit further receives a response from said second communications unit and sends a response to the communication unit using said second protocol.

42. The communications server of claim 39 wherein said processing unit establishes, responsive to said indication and using said first protocol, contact with a plurality of communications units.

43. The communications server of claim 39 wherein said processing unit further determines said first communications services by analysis of said indication of a desired communications.

44. The communications server of claim 39 wherein said processing unit further determines said first communications services by analysis of one of user preferences and type of information to be communicated.

45. The communications server of claim 39 wherein said processing unit further discovers said second communications services by interrogation of each participating unit to determine what third communications services are available locally to said each participating unit and identifying a set of communications services that are compatible with said third communications services.

46. The communications server of claim 39 wherein said processing unit further discovers said second communication services by facilitating an information exchange regarding locally available services between said communications unit and said second communications unit.

47. The communications server of claim 39 wherein said processing unit further selects the communications services based upon; knowledge of information to be communicated, a set of communications services available to the communications unit and said second communications unit, and preferences of users of the communications unit and said second communications unit.

~~48.~~ A method of selecting communications services for a communications unit from a plurality of communications service providers including the steps of;
communicating with a second communications unit over a Wide Area Network (WAN) service provider, and
selecting communications services from a Wireless Local Area Network (WLAN) service provider for one of the communications unit and said second communications unit.

49. The method of claim 48 wherein said step of selecting further includes an exchange with a communications server and one of the communications unit and said second communications unit.

50. The method of claim 49 wherein said exchange with a communications server facilitates one of authorization, authentication, and billing services for one of the communications unit and said second communications unit for use of the communications services from one of said WLAN and said WAN.